

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :																											
Product line	: W21 EX d IIB T4 Three-Phase		Product code : 12314405																								
Frame	: 315S/M	Locked rotor time	: 48s (cold) 27s (hot)																								
Output	: 110 kW	Temperature rise	: 80 K																								
Poles	: 4	Duty cycle	: S1																								
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C																								
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.																								
Rated current	: 202/116 A	Protection degree	: IP55																								
L. R. Amperes	: 1434/826 A	Cooling method	: IC411 - TEFC																								
LCR	: 7.1	Mounting	: B3T																								
No load current	: 54.0/31.1 A	Rotation ¹	: Both (CW and CCW)																								
Rated speed	: 1480 rpm	Noise level ²	: 77.0 dB(A)																								
Slip	: 1.33 %	Starting method	: Direct On Line																								
Rated torque	: 72.4 kgfm	Approx. weight ³	: 1027 kg																								
Locked rotor torque	: 210 %																										
Breakdown torque	: 240 %																										
Insulation class	: F																										
Service factor	: 1.00																										
Moment of inertia (J)	: 2.71 kgm ²																										
Design	: N																										
Output	50%	75%	100%																								
Efficiency (%)	92.0	93.3	94.0																								
Power Factor	0.80	0.86	0.88																								
Foundation loads																											
		Max. traction	: 813 kgf																								
		Max. compression	: 1840 kgf																								
<table> <thead> <tr> <th></th> <th></th> <th>Drive end</th> <th>Non drive end</th> </tr> </thead> <tbody> <tr> <td>Bearing type</td> <td>:</td> <td>6319 C3</td> <td>6316 C3</td> </tr> <tr> <td>Sealing</td> <td>:</td> <td>Taconite Labyrinth</td> <td>Taconite Labyrinth</td> </tr> <tr> <td>Lubrication interval</td> <td>:</td> <td>9029 h</td> <td>10421 h</td> </tr> <tr> <td>Lubricant amount</td> <td>:</td> <td>45 g</td> <td>34 g</td> </tr> <tr> <td>Lubricant type</td> <td>:</td> <td colspan="2" rowspan="2">Mobil Polyrex EM</td></tr> </tbody> </table>						Drive end	Non drive end	Bearing type	:	6319 C3	6316 C3	Sealing	:	Taconite Labyrinth	Taconite Labyrinth	Lubrication interval	:	9029 h	10421 h	Lubricant amount	:	45 g	34 g	Lubricant type	:	Mobil Polyrex EM	
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Notes																											
<p>This revision replaces and cancel the previous one, which must be eliminated.</p> <p>(1) Looking the motor from the shaft end.</p> <p>(2) Measured at 1m and with tolerance of +3dB(A).</p> <p>(3) Approximate weight subject to changes after manufacturing process.</p> <p>(4) At 100% of full load.</p>		<p>These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.</p>																									
Rev.	Changes Summary		Performed	Checked	Date																						
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Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	150 °C

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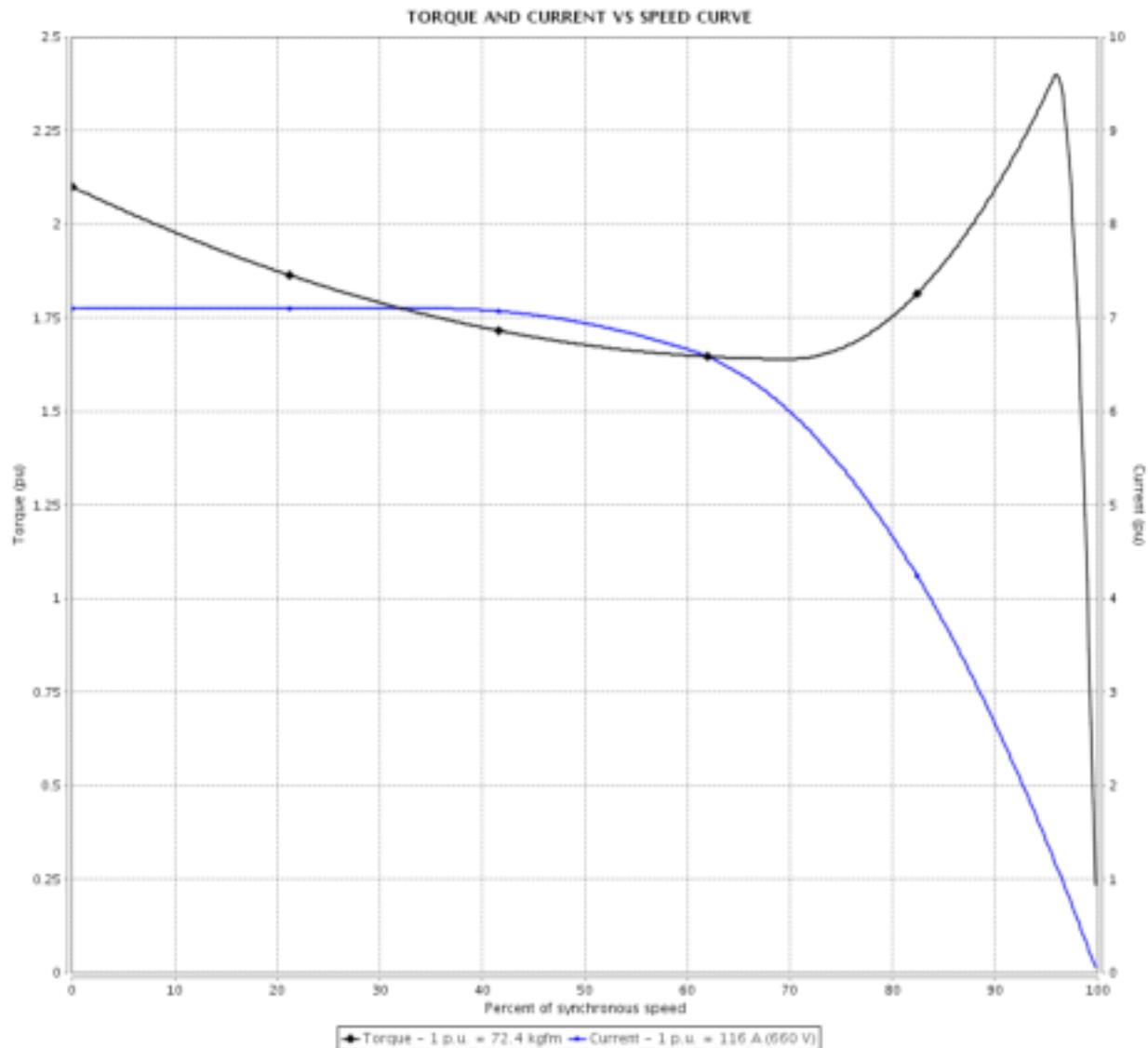
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 PUMP/FILTER Three-Phase Product code : 12314405



Performance : 380/660 V 50 Hz 4P

Rated current LRC	: 202/116 A : 7.1	Moment of inertia (J)	: 2.71 kgm ²
Rated torque	: 72.4 kgfm	Duty cycle	: S1
Locked rotor torque	: 210 %	Insulation class	: F
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Rated speed	: 1480 rpm	Temperature rise	: 80 K
		Design	: N

Locked rotor time : 48s (cold) 27s (hot)

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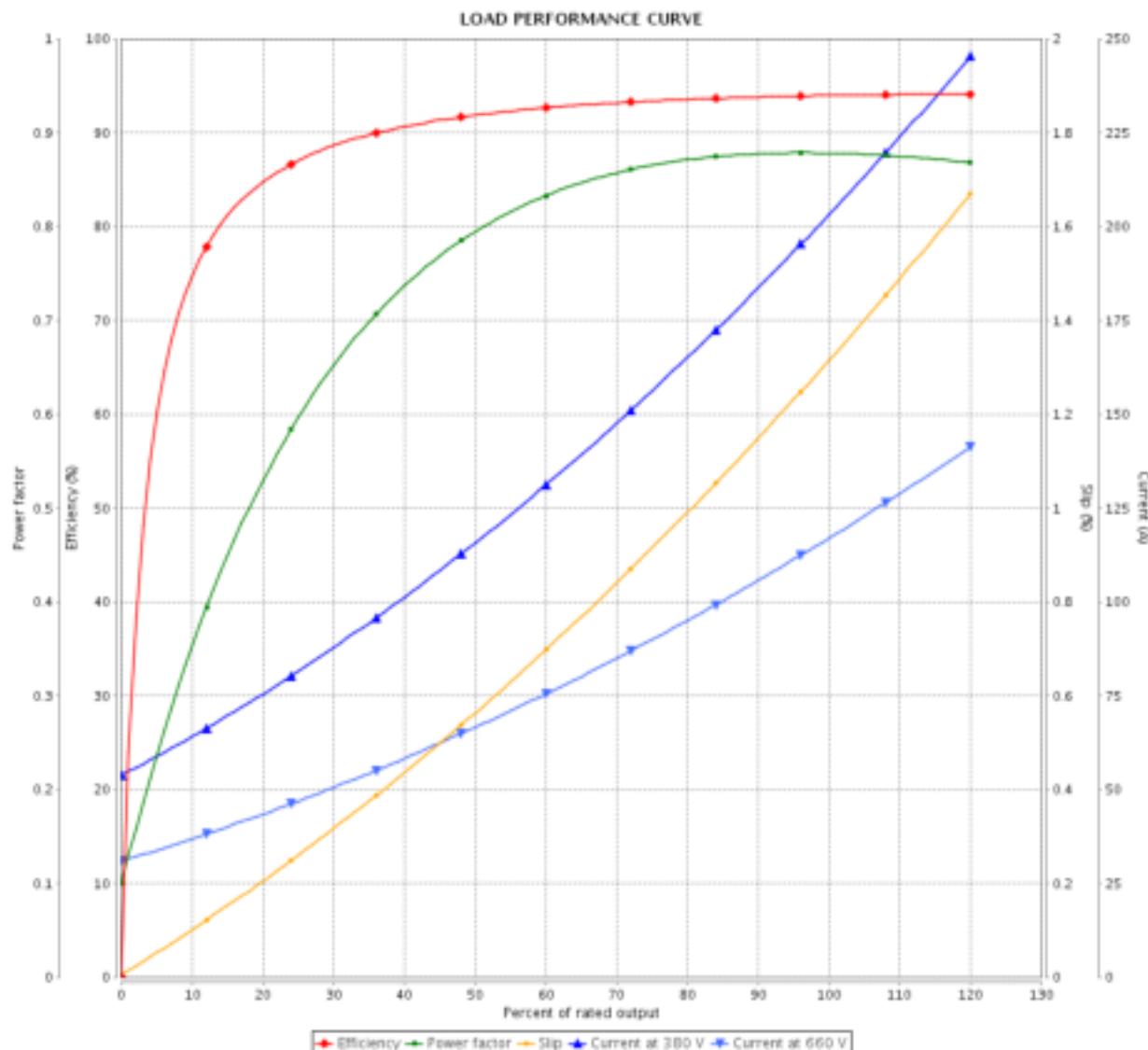
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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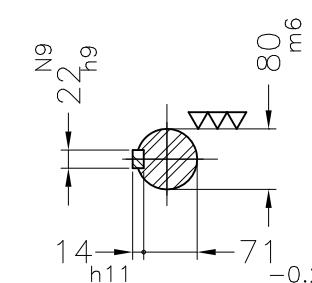
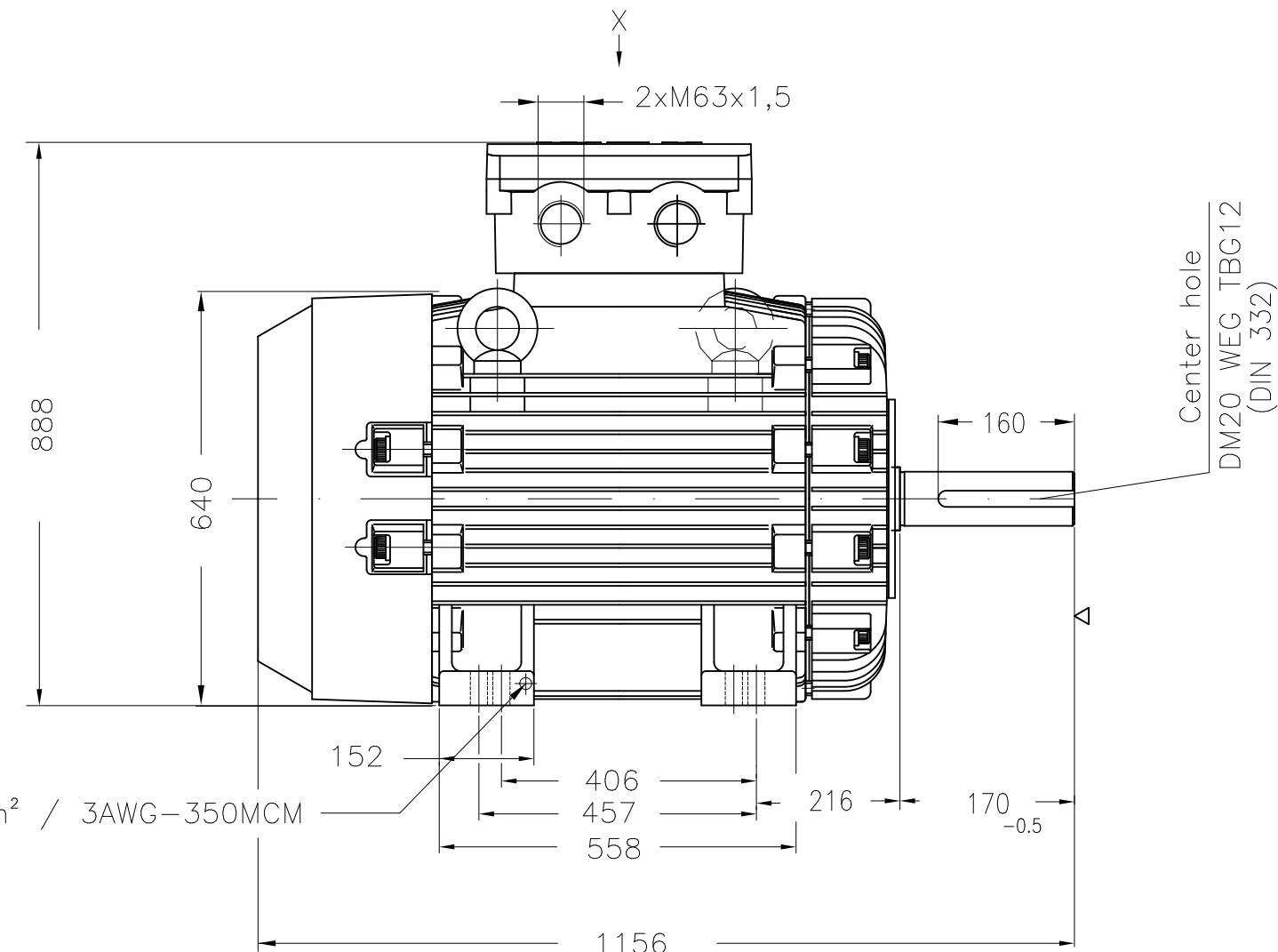
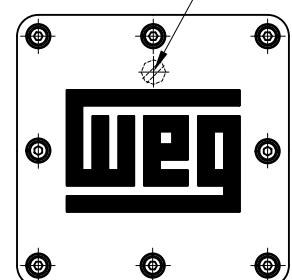
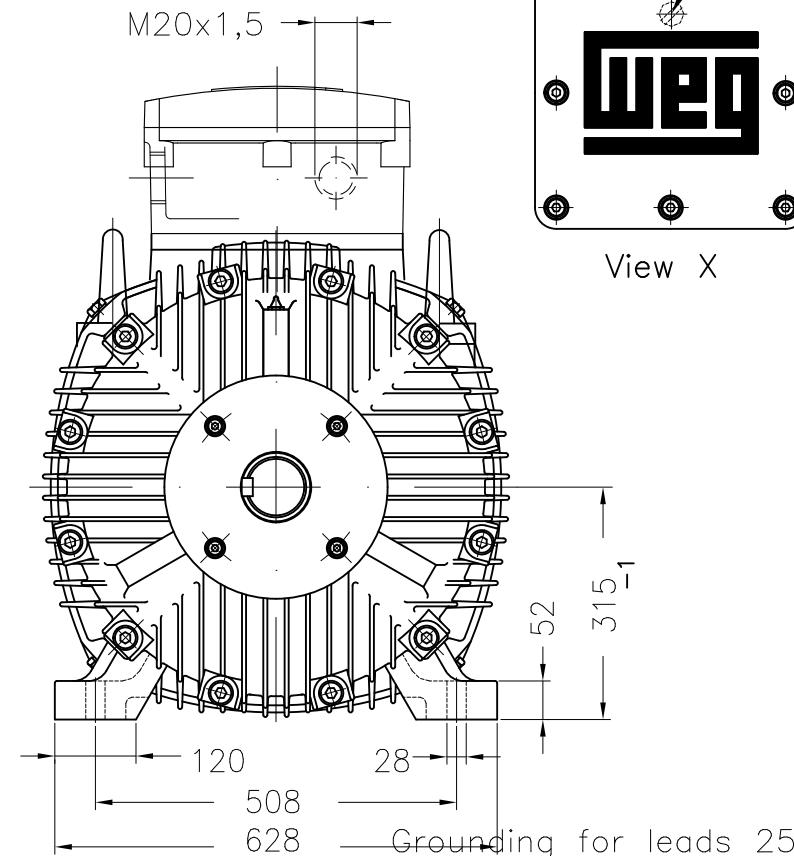
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Dimensões em mm
Dimensions in mm

THIS IS AN UPDATED REVISION, THE
PREVIOUS ONE MUST BE DISREGARDED.

Grounding for leads 35–70 mm² / 1–2/0 AWG



DE Shaft End

Connection bolts – EExd
Color RAL 5010
Painting plan 202P
Mounting B3T

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE PHASE EXPLOSION PROOF MOTOR					
CHECKED		FRAME 315S/M IP55 TEFC					
RELEASED		WEG code: 12314405					



110 kW 04 Poles 50 Hz

A

